

CLAIMS

1. A transgenic non-human mammal introduced with an OX40L gene which constantly expresses OX40L in T cells.
2. The transgenic non-human mammal according to claim 1, wherein the OX40L gene is comprised of a DNA sequence of GenBank Accession No. U12763.
3. The transgenic non-human mammal according to claim 1, wherein the OX40L gene is introduced under the control of a T cell-specific lck promoter.
4. The transgenic non-human mammal according to claim 1 introduced with the OX40L gene and has an onset of an autoimmune disease.
5. The transgenic non-human mammal according to claim 4, wherein the autoimmune disease is an interstitial pneumonia.
6. The transgenic non-human mammal according to claim 4, wherein the autoimmune disease is an inflammatory bowel disease.
7. The transgenic non-human mammal according to claim 6, wherein the inflammatory bowel disease has an onset of moderate to severe hyperplasia of lymphatic system in the intestinal basal membrane, hyperplasia of mucous epithelium in basal membrane, lymphocyte invasion or hyperplasia of submucous lymphoid follicle.
8. The transgenic non-human mammal according to claim 4, wherein

the autoimmune disease is a splenomegaly or lymphadenopathy.

9. The transgenic non-human mammal according to claim 4, wherein the autoimmune disease is a hyperimmunoglobulinemia.

10. The transgenic non-human mammal according to claim 1, wherein the transgenic non-human mammal is a mouse.

11. A method for constructing a transgenic non-human mammal, wherein an expression plasmid DNA that encodes OX40L is injected into a pronucleus of a fertilized egg of a non-human mammal to introduce an OX40L gene into a non-human mammal.

12. The method for constructing a transgenic non-human mammal according to claim 11, wherein the OX40L gene is comprised of a DNA sequence of GenBank Accession No. U12763.

13. The method for constructing a transgenic non-human mammal according to claim 11, wherein the expression plasmid DNA that encodes OX40L is comprised of an OX40L cDNA under the control of a T cell-specific lck promoter.

14. The method for constructing a transgenic non-human mammal according to claim 11, wherein the transgenic non-human mammal introduced with an OX40L gene is purified by backcross.

15. The method for constructing a transgenic non-human mammal according to claim 14, wherein the backcross is conducted at least for 12 generations.

16. The method for constructing a transgenic non-human mammal according to claim 11, wherein the non-human mammal is a mouse.

17. The method for constructing a transgenic non-human mammal according to claim 16, wherein an OX40L expression vector wherein an OX40L gene is integrated downstream of the lck promoter, introduced into a mouse fertilized egg, and the mouse is backcrossed to a C57BL/6 line mouse.

18. A method for screening a therapeutic drug for an autoimmune disease that uses a transgenic non-human mammal according to claim 1.

19. The method for screening a therapeutic drug for an autoimmune disease according to claim 18, wherein the autoimmune disease is interstitial pneumonia, inflammatory bowel disease, splenomegaly or lymphadenopathy, or hyperimmunoglobulinemia.

20. The method for screening a therapeutic drug for an autoimmune disease according to claim 17, wherein a test substance is administered to a transgenic non-human mammal introduced with an OX40L gene which constantly expresses OX40L in T cells, and changes in symptoms of autoimmune disease are evaluated and determined.

21. The method for screening a therapeutic drug for an autoimmune disease according to claim 18, wherein the transgenic non-human mammal is a mouse.

22. A therapeutic drug for diabetes obtained from the method for screening a therapeutic drug for an autoimmune disease according to claim 18.